

1. In a computing system that has access to a set of control points representing an outline of a graphical object, a method for simplifying the control data that represents the outline of the graphical object, the method comprising:

identifying a plurality of local extrema on the outline of the graphical object;

identifying a plurality of sets of local extrema, each local extremum in a set of local extrema being on a common edge of the outline of the graphical object, each set of local extrema including one or more local extremum from the plurality of identified local extrema;

determining that control points interspersed between and/or at the local extremum of each set of local extrema are on the common edge of the outline; and

generating simplified control data that represents an outline of the common edges of the graphical object.

2. The method as recited in claim 1, wherein identifying a plurality of local extrema on the outline of the graphical object comprises determining that the outline increases or decreases in the same direction at points adjacent to a point that is a prospective local extremum.

3. The method as recited in claim 1, wherein identifying a plurality of local extrema on the outline of the graphical object comprises identifying a plurality of local extrema on the outline of a typographical character.

4. The method as recited in claim 1, wherein identifying a plurality of local extrema on the outline of the graphical object comprises calculating the derivative of an

equation that defines how one or more control points are to be connected when rendering a portion of the outline.

5. The method as recited in claim 1, wherein identifying a plurality of sets of local extrema comprises determining that a plurality of local extrema are oriented in at least a similar direction.

6. The method as recited in claim 5, wherein determining that a plurality of local extrema are oriented in at least a similar direction comprises determining that a plurality of local extrema are oriented in the same direction.

7. The method as recited in claim 1, wherein identifying a plurality of sets of local extrema comprises determining that each local extremum in the plurality of local extrema is within a specified tolerance of immediately adjacent local extrema.

8. The method as recited in claim 7, wherein determining that each local extremum in a plurality of local extrema is within a specified tolerance of immediately adjacent local extrema comprises determining that each local extremum in a plurality of local extrema is within specified distance tolerance of immediately adjacent local extrema.

9. The method as recited in claim 7, wherein determining that each local extremum in a plurality of local extrema is within a specified tolerance of immediately adjacent local extrema comprises determining that each local extremum in a plurality of local extrema is within specified angle tolerance of immediately adjacent local extrema.

10. The method as recited in claim 1, wherein generating simplified control data that represents an outline of the common edges of the graphical object comprises generating a reduced set of control points, the reduced set of control points representing the features of the outline without representing some variations that would otherwise be included in the outline.

11. The method as recited in claim 1, wherein generating simplified control data that represents an outline of the common edges of the graphical object comprises generating simplified control data that represents an outline of the common edges a typographical character.

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12. In a computing system that has access to a set of control points representing an outline of a graphical object, a method for determining that a plurality of local extrema are on a common edge of the outline, the method comprising:

identifying first and second consecutive local extrema on the outline;

determining that the direction of the outline at both the first and second consecutive local extrema is at least a similar direction; and

determining that the first local extrema is within a specified tolerance of the second local extrema.

13. The method as recited in claim 12, wherein identifying first and second consecutive local extrema on the outline comprises identifying first and second consecutive local extrema on the outline of a typographical character.

14. The method as recited in claim 12, wherein identifying first and second consecutive local extrema on the outline comprises determining that the outline increases or decreases in the same direction at points adjacent to the first consecutive local extremum.

15. The method as recited in claim 12, wherein identifying first and second consecutive local extrema on the outline comprises determining that the outline increases or decreases in the same direction at points adjacent to the second consecutive local extremum.

16. The method as recited in claim 12, wherein identifying first and second consecutive local extrema on the outline comprises taking the derivative of an equation that

defines how the first and second consecutive local extrema are to be connected when rendering the outline.

17. The method as recited in claim 12, wherein determining that the direction of the outline at both the first and second consecutive local extrema is at least a similar direction comprises determining that the direction of the outline at both the first and second consecutive local extrema is the same direction.

18. The method as recited in claim 12, wherein determining that the first local extrema is within a specified tolerance of the second local extrema comprises determining that the first local extrema is within a specified distance tolerance of the second local extrema.

19. The method as recited in claim 12, wherein determining that the first local extrema is within a specified tolerance of the second local extrema comprises determining that the first local extrema is within a specified angle tolerance of the second local extrema.

20. A computer program product for use in a computing system that has access to a set of control points representing an outline of a graphical object, the computer program, product for implementing a method for simplifying the control data that represents the outline of the graphical object, the computer program product comprising one or more computer-readable media having stored thereon computer executable instructions that, when executed by a processor, cause the computing system to perform the following:

identify a plurality of local extrema on the outline of the graphical object;

identifying a plurality of sets of local extrema, each local extremum in a set of local extrema being on a common edge of the outline of the graphical object, each set of local extrema including one or more local extremum from the plurality of identified local extrema;

determine that control points interspersed between and/or at the local extremum of each set of local extrema are on the common edge of the outline; and

generate simplified control data that represents an outline of the common edges of the graphical object.

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